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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,764	10/29/2003	Mohammad Shahanshah Akhter	PAT 812-2 US	5288

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BORDEN LADNER GERVAIS LLP
WORLD EXCHANGE PLAZA
100 QUEEN STREET SUITE 1100
OTTAWA, ON K1P 1J9
CANADA

EXAMINER	
RAO, ANAND SHASHIKANT	
ART UNIT	PAPER NUMBER
2621	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/694,764	AKHTER ET AL.	
	Examiner	Art Unit	
	Andy S. Rao	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Krieger.

Krieger discloses a method of converting a plurality of MPEG frames, each frame having a header and a payload, into a source word for channel encoding (Krieger: figures 8A-8B), the method comprising: concatenating the payloads of the plurality of MPEG frames (Krieger: column 2, lines 55-62); generating a synchronizing word correlated to the concatenated payload (Krieger: column 1, lines 43-53); and combining the concatenated payload and the generated synchronizing word to form the source word (Krieger: column 4, lines 1-10), as in claim 1.

Regarding claim 2, Krieger discloses wherein the plurality of MPEG frames form an integer multiple number of MPEG superframes (Krieger: column 1, lines 30-35), as in the claim.

Regarding claim 3, Krieger discloses wherein the channel encoding is turbo encoding (Krieger: column 3, lines 50-62), as in the claim.

Regarding claim 4, Krieger discloses wherein the step of generating includes selecting a synchronizing word having a high degree of correlation to the concatenated payload (Krieger: column 5, lines 35-55), as in the claim.

Regarding claim 5, Krieger discloses wherein the step of selecting includes computing a parity check block using Reed-Solomon encoding (Krieger: column 3, lines 1-2), as in the claim.

Regarding claim 6, Krieger discloses using a wherein the step of selecting includes computing a parity check block using a cyclical redundancy code (Krieger: column 3, lines 1-2), as in the claim.

Regarding claim 7, Krieger discloses wherein the step of generating includes selecting a synchronizing word in accordance with both the payload and characteristics of the channel encoding (Krieger: column 4, lines 20-35), as in the claim.

Regarding claim 8, Krieger discloses wherein the step of generating a synchronizing word includes selecting a synchronizing word having the same length as the length of a concatenation of the headers of the plurality of MPEG frames (Krieger: column 2, lines 55-62), as in the claim.

Regarding claims 9-11, Krieger discloses wherein the step of combining includes concatenating the synchronizing word and the concatenated payload (Krieger: column 3, liens 50-55), as in the claims.

Krieger discloses a method of converting a channel encoding source word, having both a payload and a synchronizing word, the synchronizing word used for at least one of channel decoding synchronization and error correction, into a plurality of MPEG frames (Krieger: figures 8A-8B; column 5, lines 35-55), the method comprising: dividing the source word into the synchronizing word and the payload, (Krieger: column 5, lines 15-38) payload containing a plurality of MPEG frame payloads (Krieger: column 1, lines 15-20); generating an MPEG header (Krieger: column 2, lines 55-62); appending one of the plurality of MPEG frame payloads to the generated header (Krieger: column 5, liens 60-67); and repeating the steps of generating and appending until each of the plurality of MPEG frame payloads has been.appended to a header (Krieger: column 6, lines 45-60), as in claim 12.

Regarding claims 13-14, Krieger discloses further including the step of correcting errors in the payload of the synchronizing word in accordance with error correction properties of the synchronizing word (Krieger: column 6, lines 13-20), as in the claims.

Regarding claim 15-16, Krieger discloses wherein the step of generating the MPEG frame header includes generating a header having a value of 47 HEX (Krieger: column 2, lines 59-61), as in the claims.

Regarding claim 16, Krieger discloses Krieger discloses wherein the plurality of MPEG frame payloads form the payload to an integer multiple number of MPEG superframes (Krieger: column 1, lines 30-32), and, wherein the step of generating the MPEG header includes generating a header having a value of 47 HEX* for any MPEG header corresponding to the header of an MPEG superframe (Krieger: column 2, lines 58-60), as in the claim.

Krieger discloses a source word generator for converting a plurality of MPEG frames, each frame having a header and a payload, into a channel encoding source word (Krieger: figure 1), the generator comprising: a frame formatter (Krieger: column 2, lines 50-55) for receiving the plurality of MPEG frames from an MPEG source (Krieger: column 1, lines 15-20), and for concatenating the payloads of each of the plurality of MPEG frames (Krieger: column 3, lines 50-55); a synchronizing word generator, for generating a synchronizing word in accordance with the concatenated payload (Krieger: column 1, lines 40-60); and a combiner for receiving the concatenated payload from the frame formatter, and the synchronizing word from the synchronizing word generator (Krieger: column 3, lines 5-10), and for combining the concatenated payload and the synchronizing word to form the channel encoding source word (Krieger: column 3, lines 60-67), as in claim 17.

Regarding claim 18, Krieger discloses wherein the synchronizing word generator includes at least one of a Reed-Solomon encoder for generating a parity block for use as the synchronizing word and a cyclical redundancy check encoder for generating a parity block for

use as the synchronizing word (Krieger: column 2, lines 65-67; column 3, lines 1-2), as in the claim.

Regarding claim 19, Krieger discloses wherein the combiner includes means to concatenate the concatenated payload and the synchronizing word to form the channel encoding source word (Krieger: column 3, lines 50-62), as in the claim.

Krieger discloses an MPEG frame reassembler for converting a channel encoded source word, having both a concatenated payload and a synchronizing word, into a plurality of MPEG frames (Krieger: figure 2), the reassembler comprising: a synchronizing word identifier for receiving the channel encoded source word (Krieger: column 5, lines 15-20) and for dividing the received source word into the synchronizing word and the concatenated payload (Krieger: column 6, lines 20-45), the concatenated payload containing a plurality of MPEG frame payloads (Krieger: column 1, lines 15-20); and a header generator for generating headers for MPEG frames and for prepending the generated headers to the each of the plurality of MPEG payloads to create a plurality of MPEG frames (Krieger: column 7, lines 35-40), as in the claim 20.

Regarding claim 21, Krieger discloses further including an error corrector for correcting errors in the payload of the source word in accordance with error correction properties of the synchronizing word (Krieger: column 6, lines 10-20), as in the claim.

Regarding claim 22, Krieger discloses wherein the header generator includes means identifying an MPEG superframe and for generating an MPEG superframe header for prepending to the first MPEG frame in the MPEG superframe (Krieger: column 1, lines 30-35), as in the claim.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lin discloses a high speed data service satellite modem termination system and satellite and modems.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
March 2, 2007